

REMARKSStatus of the Claims

Claims 5-8 have been cancelled herein, claims 1-4 having previously been cancelled.

New claims 9-16 have been added and are currently pending.

No new matter has been introduced.

Claim Rejections – 35 U.S.C. § 112

Claims 5-8 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement on the ground that "[t]he original specification does not appear to support the new claimed language which recites: 'the two steps being performed in parallel'." The claimed language in question merely states that the two steps are carried out concurrently, i.e., at the same time. This is clearly disclosed in the original specification, see, for example, page 24, lines 5-13. We respectfully disagree, therefore, that the original specification lacks support for the claimed language in question.

Without acquiescing in the rejection, applicant has cancelled claims 5-8 and has submitted new claims 9-16 which do not contain the aforementioned claimed language. The rejection under 35 U.S.C. § 112, 1st paragraph, therefore, is moot.

Claim Rejection – 35 U.S.C. §103

Claims 5-8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 406051679 (Aoki) in view of U.S. patent No. 5,082,604 (Valyi). Reconsideration and withdrawal of the rejection are respectfully requested insofar as it might be asserted against new claims 9-16.

As defined in base claim 9, the claimed invention pertains to a method for producing a magnet roller by injecting a resin-bonded magnet material into a product cavity formed by a fixed metal mold and a movable metal mold that comprises an end of the product cavity. In accordance with the invention, the movable metal mold is moved by the force of the injected material such that the volume of the product cavity is increased in accordance with the amount of the magnet material injected into the cavity. Concurrently with the injection of the magnet material, a magnetic field is applied to the product cavity.

The Aoki reference discloses the manufacture of a magnet roller by injecting a magnetic powder/binder mixture into the cavity of a mold while applying a magnetic field thereto, but does not disclose the specific configuration of the injection mold. Thus, there is no mention in the Aoki reference of a movable mold to change the cavity volume in accordance with the amount of resin-bonded material that is injected into the cavity in a molten state during the application of the magnetic field, as is required by the base claim 9.

The Valyi reference discloses a mold cavity formed by a tube 4 and two end plates 2 and 5. The mold cavity is divided into two volumes A and B by a movable piston 7. Molten plastic injected into volume A displaces the piston 7 axially along the tube 4 against the pressure within volume B. The Valyi reference, however, concerns only the molding of "common thermoplastics" (Col. 2, lines 15-19), and includes no disclosure or suggestion that the molding process disclosed would be useful with resin-bonded magnetic material as claimed by the applicant. For the reasons set out at pages 2-5 of applicant's specification, the molding of resin-bonded magnetic material presents unique problems, due to the nature of the magnet material and the presence of the applied magnetic field, that do not exist in molding common thermoplastics. The Valyi patent, therefore, neither addresses the same problems in the prior art

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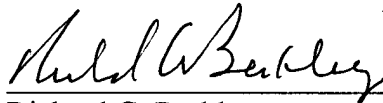
as does the claimed invention, nor teaches a solution to such problems. Consequently, it would not have been obvious from the Aoki reference and the Valyi patent to modify the Aoki molding process as proposed in the rejection.

All of claims 10-16 are dependent upon claim 9 and are patentable therewith over the cited art.

Conclusions

In view of the foregoing, we respectfully submit that the application is in condition for allowance in all respects. Issuance of the application to patent is respectfully requested.

Respectfully submitted,



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